

New Jersey Department of Transportation Office of Maritime Resources

***Natural resource or Toxic waste:
What is dredged material anyway?***

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Beneficial Use of Dredged Material Summit
Wildwood, NJ***



DEFEAT



the **MUCK MONSTER**

The background of the slide is a photograph of silty dredged material. It shows a dark, muddy surface with some lighter, sandy areas and some debris. The texture is rough and uneven.

Silty Dredged Material

- ✍ **Sand, silt or clay particles**
- ✍ **Not soil (but may be amended and used as soil – more on that later today)**
- ✍ **Storm events**
- ✍ **Landside runoff**
- ✍ **May contain contaminants**

Mother Nature vs. Maritime



What is dredging?

- ✍ **Dredging is the act of construction or maintenance of an underwater highway**
- ✍ **Dredged material is the sediment removed during these actions**



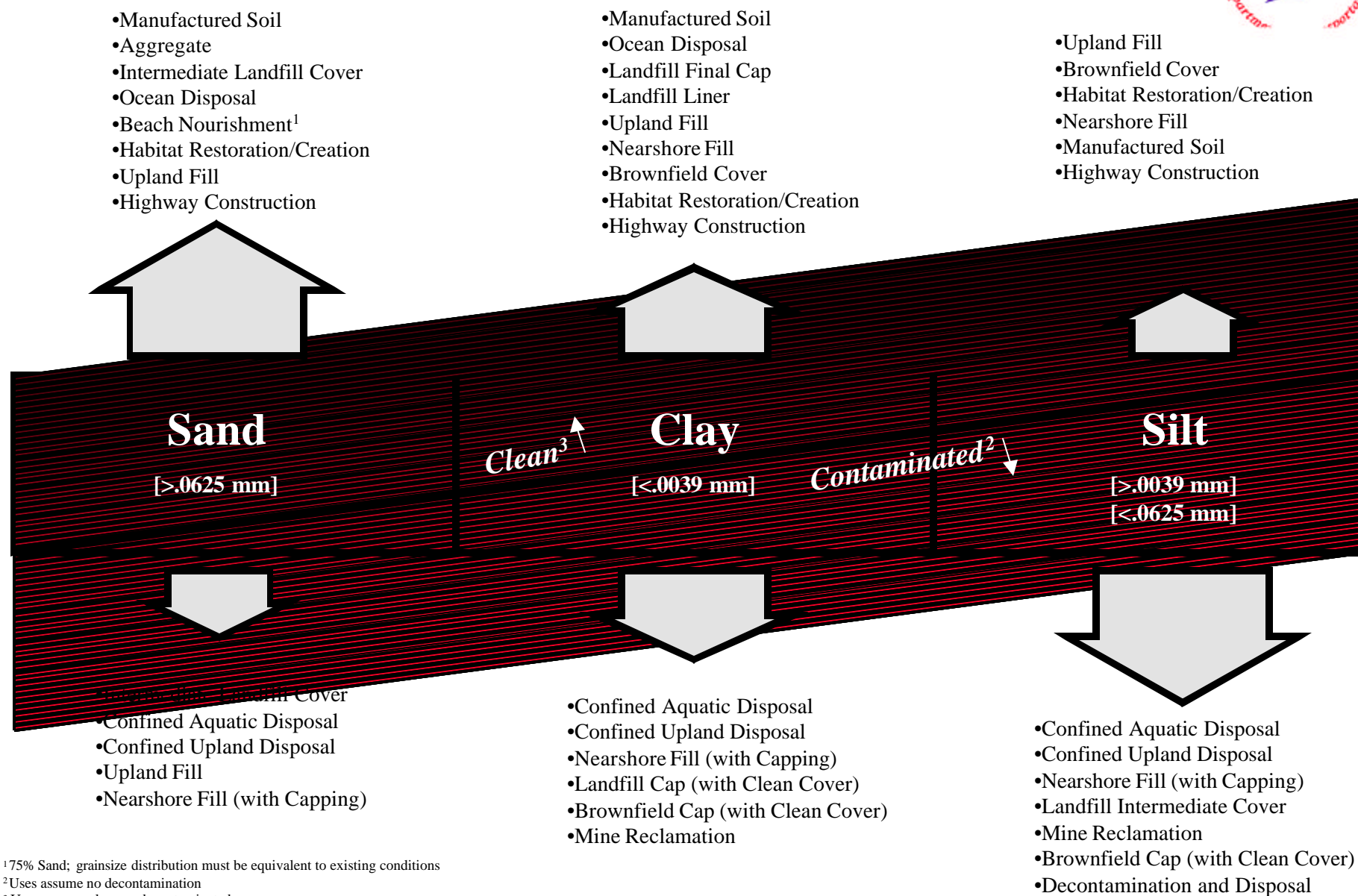
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Dredging Methods in New Jersey



What Happens to Our Dredged Material?

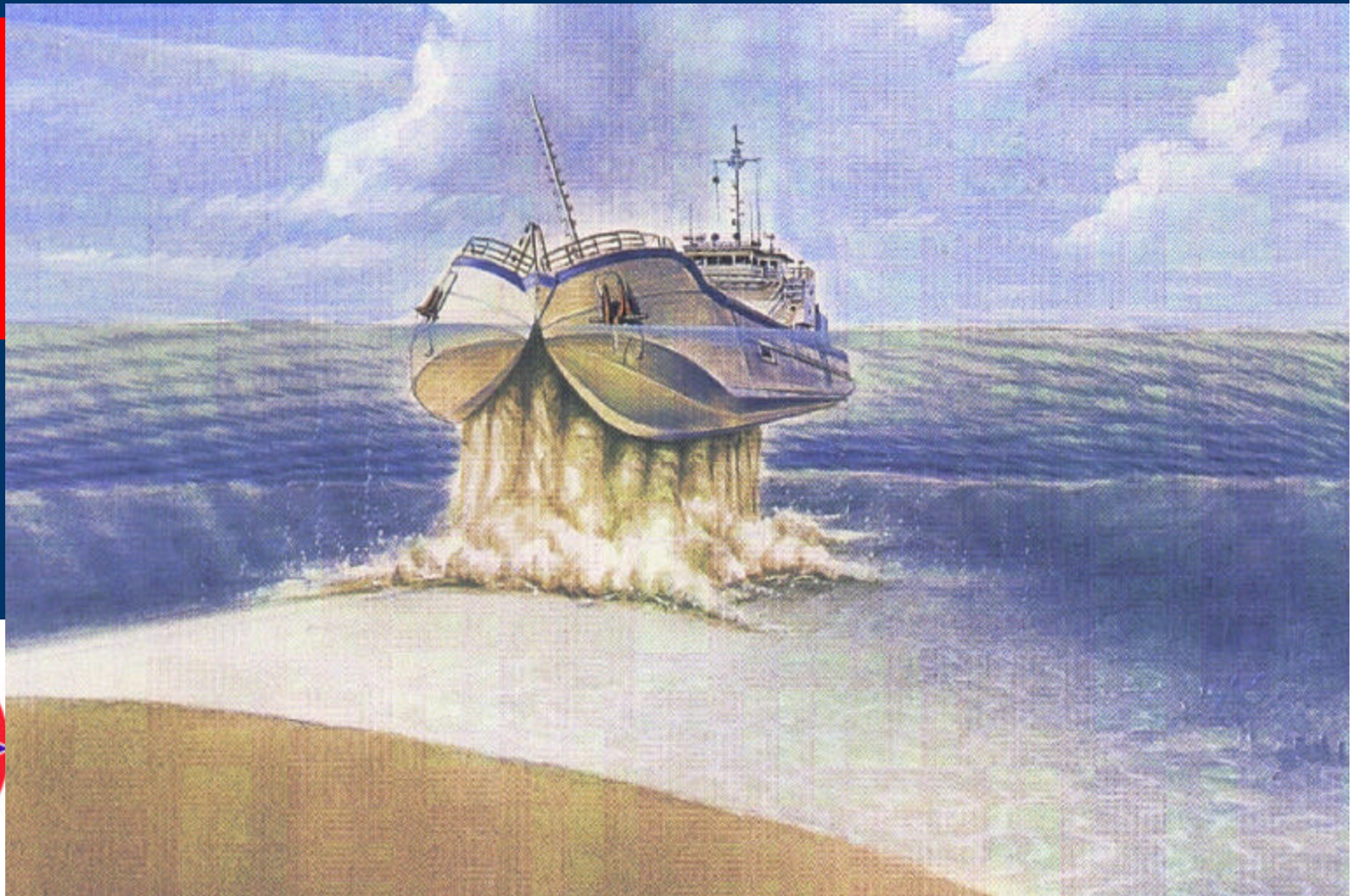


¹ 75% Sand; grainsize distribution must be equivalent to existing conditions

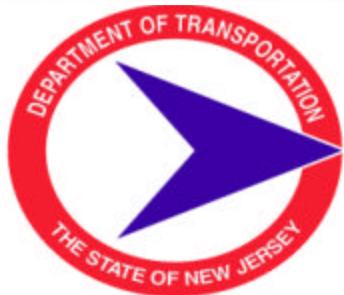
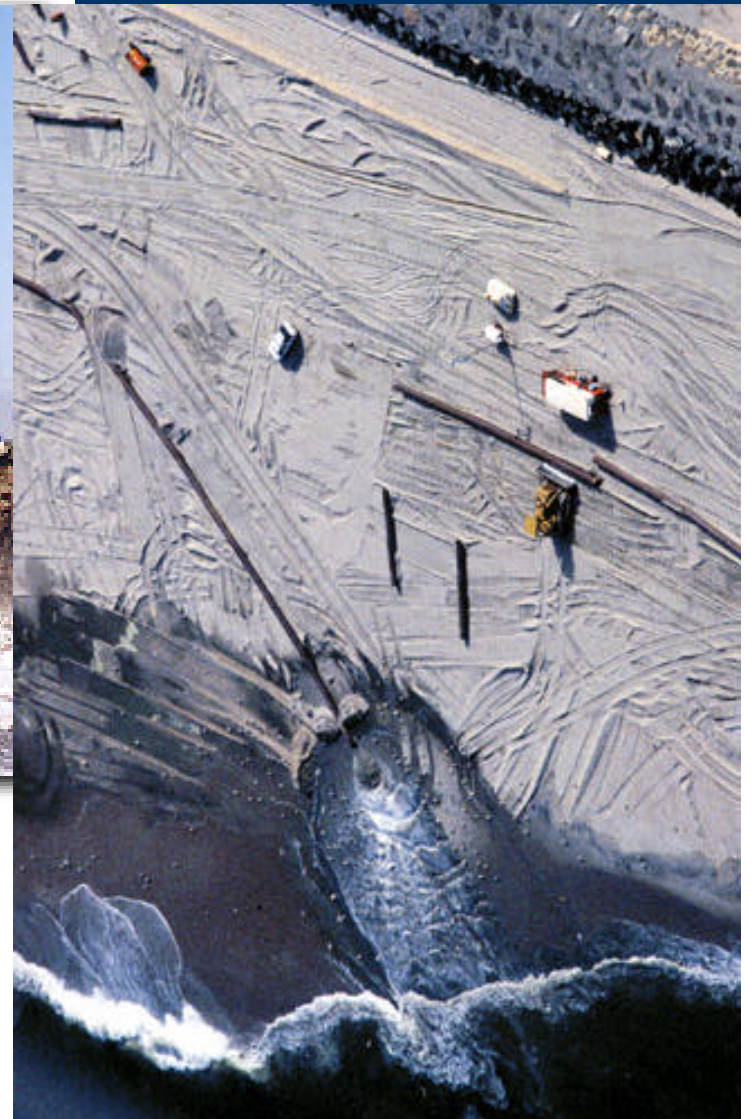
² Uses assume no decontamination

³ Uses assume clean or decontaminated

Aquatic Disposal



Beach Replenishment



Confined Upland Disposal

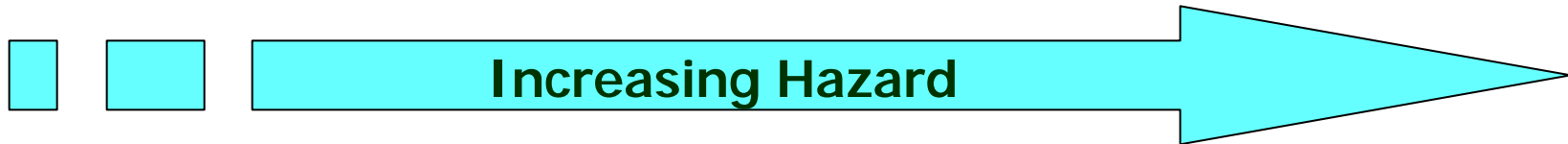
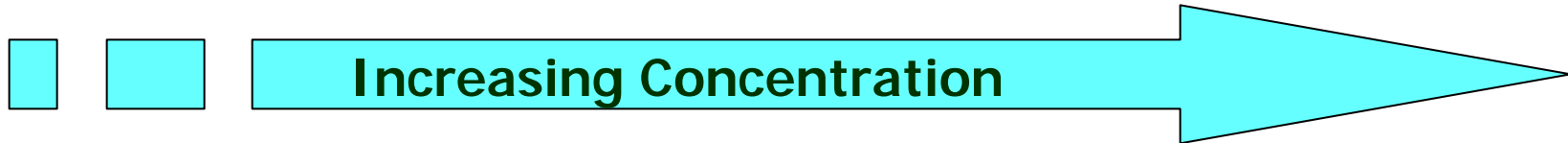


So why all the fuss?

- ✍ **Sediment and soil particles adsorb and concentrate pollutants**
- ✍ **Sediments can be a historical record of pollution**
- ✍ **Increased public awareness and concern about industrial contaminants**
- ✍ **Sediments are the main source of food for the aquatic community**
- ✍ **NIMBY: Marine sediments can be unsightly and compete for space**



Sediment Management Decision Making



Preindustrial
Zone

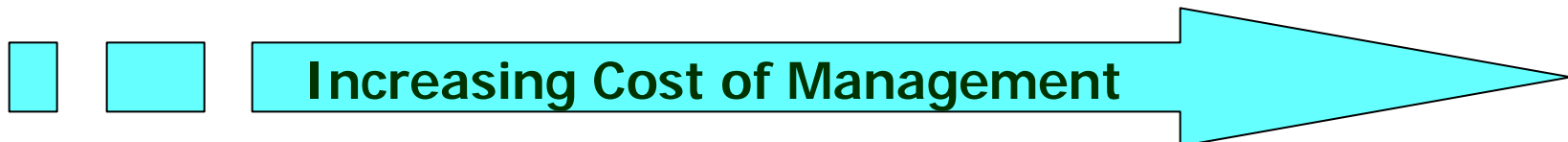
Judgement Zone

Hazardous
Waste Zone

SQV: Background

Assessment Tool Depends on Situation

SQV: RCRA



Beneficial Use of CDF Material



Dewatered Dredged Material



Palmyra Cove Beneficial Use Technology Campus

ENVIRONMENTAL EDUCATION CENTER

DELICIOUS MATH RIVER CIO

RIVER SHORE WALKWAY



MANAGEMENT AREA
 1267 ACRES
 4,000 FEET ON THE DELAWARE RIVER
 1,000 FEET ON THE PENNSAUKEN CREEK



Riverwinds Golf Course

160,000 cyd



Old Confined Disposal Facilities

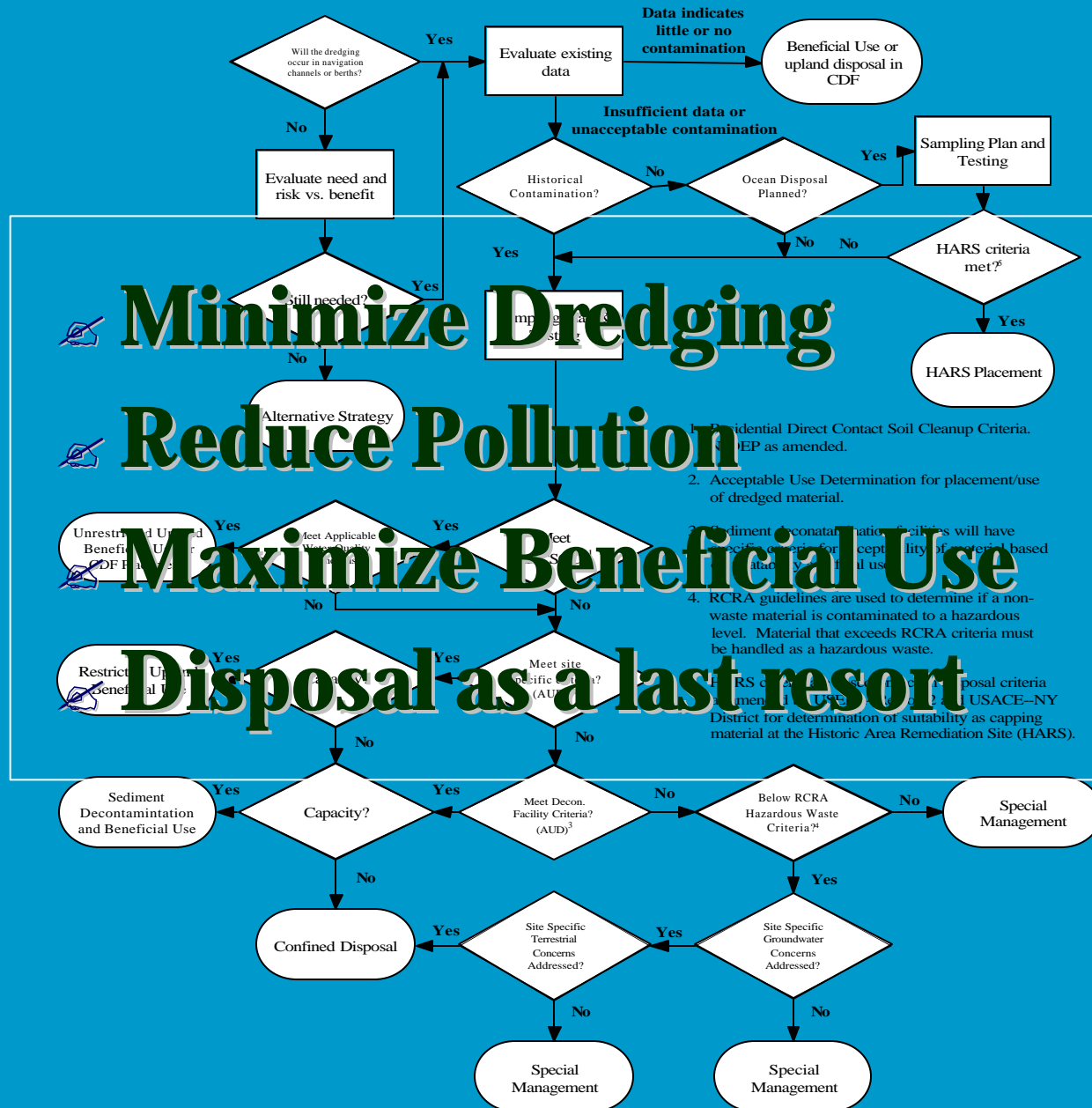


**Resource for
construction
materials**

AND

**Resource for
future
dredged
material
management**

New Jersey's Dredged Material Management Plan



It's your move...



A black and white photograph of a fish, possibly a striped bass, swimming underwater. The fish is wearing a scuba mask with a large circular lens and a snorkel attached to the side. The background is dark and blurry, suggesting an underwater environment with some vegetation or rocks.

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